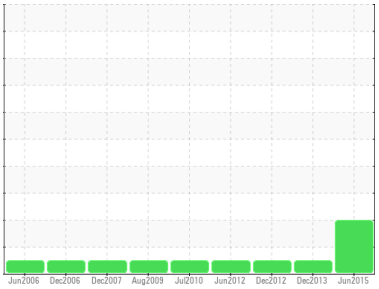
PROBLEM SUMMARY

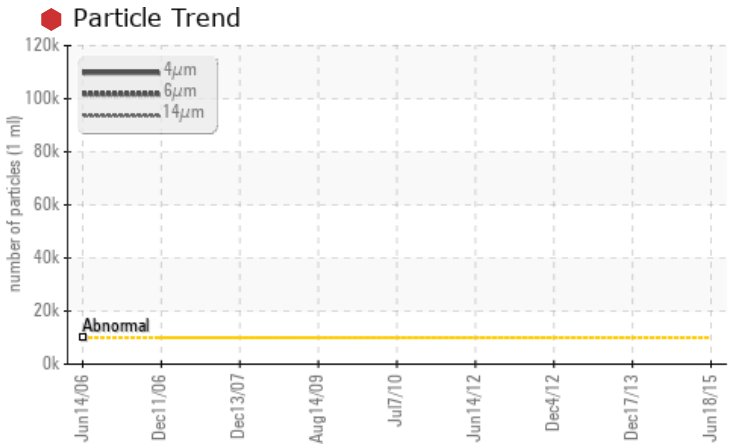
Sample Rating Trend



ISO

Area
[137520]
Machine Id
HCT G1UGBR THBR
Component
Bearing
Fluid
ESSO TERESSO ISO 68 (95 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Particles >4µm		ASTM D7647	>10000	**104713**	---	---
Particles >6µm		ASTM D7647	>2500	**16616**	---	---
Particles >14µm		ASTM D7647	>160	**409**	---	---
Particles >21µm		ASTM D7647	>40	**61**	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/14	**24/21/16**	---	---

Customer Id: NEWSTJ
Sample No.: WC925448
Lab Number: 02003853
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	MISSED	Aug 25 2016	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Seals	MISSED	Aug 25 2016	?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

17 Dec 2013 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

04 Dec 2012 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the component. The TAN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

14 Jun 2012 Diag: Wes Davis

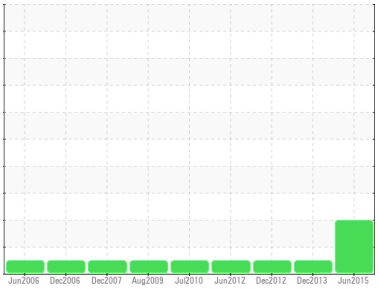
NORMAL

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the component. The condition of oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
[137520]
Machine Id
HCT G1UGBR THBR
Component
Bearing
Fluid
ESSO TERESSO ISO 68 (95 LTR)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

Contamination

Particles >4µm are severely high. Particles >6µm are abnormally high. Particles >14µm are abnormally high. Particles >21µm are notably high. The water content is negligible.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC925448**	WC838265	WC837472
Sample Date		Client Info		**18 Jun 2015**	17 Dec 2013	04 Dec 2012
Machine Age	days	Client Info		**0**	0	0
Oil Age	days	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	Changed
Sample Status				**SEVERE**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**16**	8	10
Iron	ppm	ASTM D5185(m)	>63	**2**	<1	<1
Chromium	ppm	ASTM D5185(m)		**0**	0	0
Nickel	ppm	ASTM D5185(m)		**0**	0	<1
Titanium	ppm	ASTM D5185(m)		**<1**	0	0
Silver	ppm	ASTM D5185(m)		**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Lead	ppm	ASTM D5185(m)	>161	**<1**	<1	<1
Copper	ppm	ASTM D5185(m)	>13	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>27	**4**	2	2
Antimony	ppm	ASTM D5185(m)		**<1**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**<1**	0	0

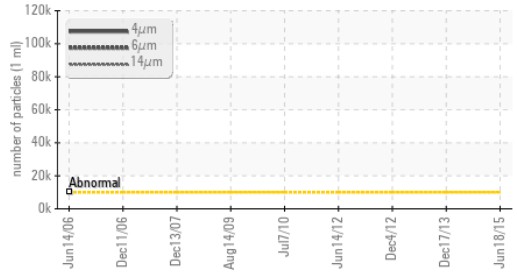
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	4.5	**0**	<1	0
Barium	ppm	ASTM D5185(m)	0.4	**<1**	1	<1
Molybdenum	ppm	ASTM D5185(m)	0	**0**	0	0
Manganese	ppm	ASTM D5185(m)		**<1**	<1	0
Magnesium	ppm	ASTM D5185(m)	0	**0**	0	0
Calcium	ppm	ASTM D5185(m)	0	**3**	<1	1
Phosphorus	ppm	ASTM D5185(m)	0.7	**4**	5	4
Zinc	ppm	ASTM D5185(m)	0	**3**	3	3
Sulfur	ppm	ASTM D5185(m)	1315	**1993**	2154	2203
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>12	**2**	1	1
Sodium	ppm	ASTM D5185(m)		**3**	1	2
Potassium	ppm	ASTM D5185(m)	>20	**0**	<1	0
Water	%	ASTM D6304*	>0.1	**0.004**	---	---
ppm Water	ppm	ASTM D6304*	>1000	**44.6**	---	---

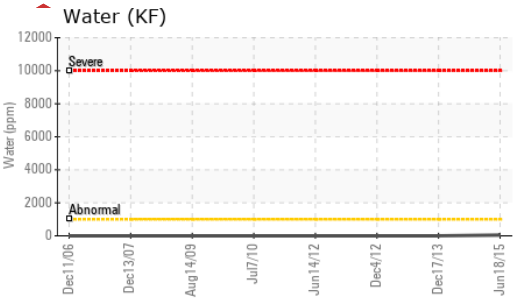
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	**104713**	---	---
Particles >6µm		ASTM D7647	>2500	**16616**	---	---
Particles >14µm		ASTM D7647	>160	**409**	---	---
Particles >21µm		ASTM D7647	>40	**61**	---	---
Particles >38µm		ASTM D7647	>10	**6**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/14	**24/21/16**	---	---

OIL ANALYSIS REPORT

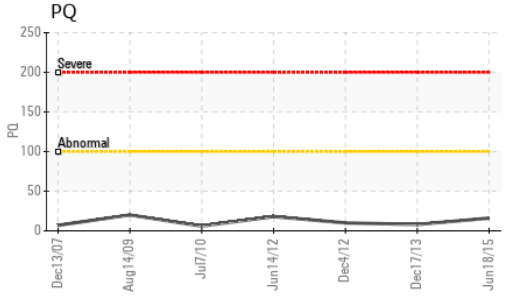
Particle Trend



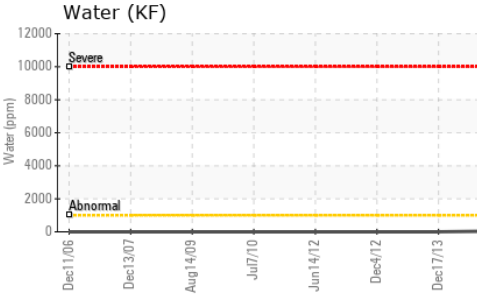
Water (KF)



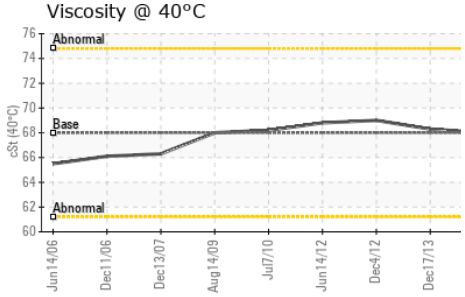
PQ



Water (KF)



Viscosity @ 40°C

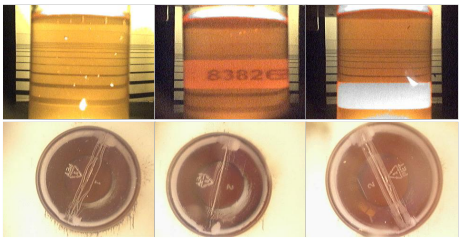


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.02	**0.096**	0.090	0.02

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Debris	scalar	Visual*	NONE	**VLITE**	VLITE	VLITE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	**.2%**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

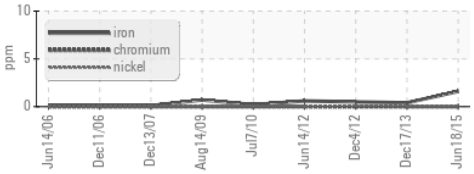
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	**68.0**	68.3	69.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

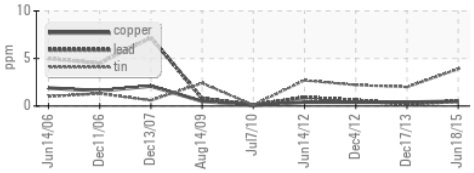


GRAPHS

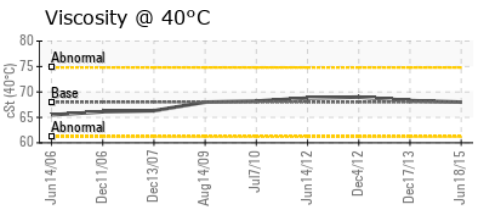
Ferrous Alloys



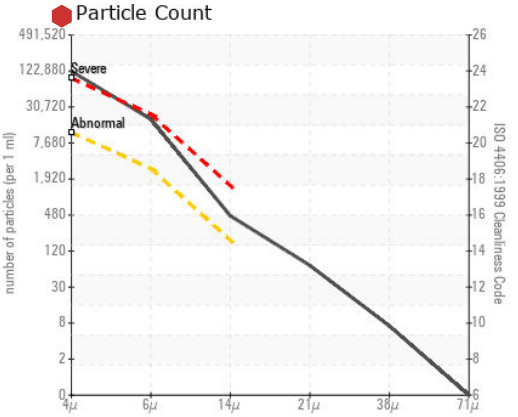
Non-ferrous Metals



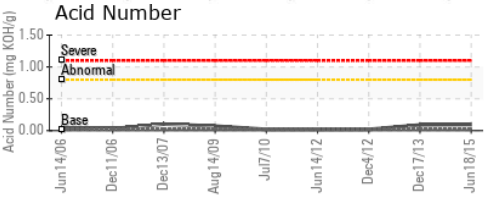
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC925448 **Received** : 24 Jun 2015
Lab Number : 02003853 **Diagnosed** : 25 Jun 2015
Unique Number : 4134081 **Diagnostician** : Wes Davis
Test Package : IND 2 (Additional Tests: KF, PrtCount, TAN Man)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
Validity of results and interpretation are based on the sample and information as supplied.

NEWFOUNDLAND POWER INC.
50 DUFFY PLACE, PO BOX 8910
ST. JOHNS, NL
CA A1B 3P6
Contact: Shane Reid
sreid@newfoundlandpower.com
T: (709)737-5209
F: (709)737-2926